

What is claimed is:

1. A film which comprises at least one fluoropolymer layer and at least one cyclo olefin polymer layer comprising at least cyclo olefin homopolymer or copolymer
5 attached to a surface of said fluoropolymer layer by an intermediate adhesive layer.
2. The film of claim 1 wherein said cyclo olefin polymer layer comprises at least one cyclo olefin homopolymer.
- 10 3. The film of claim 1 wherein said cyclo olefin polymer layer comprises at least one cyclo olefin containing copolymer.
4. The film of claim 1 wherein said cyclo olefin polymer layer comprises at least one copolymer of a cyclo olefin and ethylene.
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5. The film of claim 4 wherein said cyclo olefin polymer comprises a copolymer of ethylene and norbornene.
6. The film of claim 1 which has been uniaxially stretched at least 1.5 times in either
20 its longitudinal or transverse directions.
7. The film of claim 1 which has been biaxially stretched at least 1.5 times in each of its longitudinal and transverse directions.
- 25 8. The film of claim 1 further comprising another cyclo olefin layer comprising at least one cyclo olefin homopolymer or copolymer attached to another surface of said fluoropolymer layer by another intermediate adhesive layer.

9. The film of claim 1 further comprising another fluoropolymer layer attached to said cyclo olefin layer by another intermediate adhesive layer.

10. The film of claim 1 wherein said adhesive layer comprises at least one polyolefin having at least one functional moiety of an unsaturated carboxylic acid or anhydride thereof.

11. The film of claim 1 wherein said adhesive layer comprises a polyolefin having at least one functional moiety of maleic anhydride.

12. The film of claim 1 wherein said adhesive layer comprises a polyurethane or epoxy.

13. The film of claim 1 wherein said fluoropolymer is selected from the group consisting of chlorotrifluoroethylene homopolymers, chlorotrifluoroethylene containing copolymers and blends thereof.

14. The film of claim 1 wherein said fluoropolymer comprises a poly(chlorotrifluoroethylene) homopolymer.

15. The film of claim 1 wherein said fluoropolymer comprises a poly(chlorotrifluoroethylene) containing copolymer.

16. A method of producing a film which comprises coextruding at least one layer of a fluoropolymer, and at least one cyclo olefin polymer layer comprising at least one cyclo olefin homopolymer or copolymer attached to a surface of the fluoropolymer layer by a coextruded intermediate adhesive layer; and then forming the attached layers into a film.

17. The method of claim 16 further comprising coextruding and attaching another cyclo olefin polymer layer comprising at least one cyclo olefin homopolymer or copolymer to another surface of said fluoropolymer layer by another intermediate adhesive layer.

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18. The method of claim 16 comprising coextruding and attaching another layer of a fluoropolymer to another surface of said cyclo olefin polymer layer by another intermediate adhesive layer.

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19. The method of claim 16 wherein said intermediate adhesive layer comprises at least one of a polyurethane, an epoxy, or a polyolefin having at least one functional moiety of an unsaturated carboxylic acid or anhydride.

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20. The method of claim 16 wherein said fluoropolymer comprises a poly(chlorotrifluoroethylene) homopolymer or copolymer.

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21. The method of claim 16 wherein said film is uniaxially stretched from at least 1.5 times to about 10 times in either of its longitudinal and transverse directions or biaxially stretched from at least 1.5 times to about 10 times in each of its longitudinal and transverse directions.

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22. A method of producing a film which comprises laminating at least one layer of a fluoropolymer to one surface of a layer of a cyclo olefin homopolymer or copolymer by an intermediate adhesive layer.

23. The method of claim 22 further comprising laminating and attaching another cyclo olefin polymer layer comprising at least cyclo olefin homopolymer or copolymer to another surface of said fluoropolymer layer by another intermediate adhesive layer.

24. The method of claim 22 comprising laminating and attaching another layer of a fluoropolymer to another surface of said cyclo olefin polymer layer by another intermediate adhesive layer.

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25. The method of claim 22 wherein said the intermediate adhesive layer comprises at least one of a polyurethane, an epoxy, or polyolefin having at least one functional moiety of an unsaturated carboxylic acid or anhydride.

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26. The method of claim 22 wherein said fluoropolymer comprises a poly(chlorotrifluoroethylene) homopolymer or copolymer.

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27. The method of claim 22 wherein said film is uniaxially stretched from at least about 1.5 times to about 10 times in either of its longitudinal and transverse directions or biaxially stretched from at least about 1.5 times to about 10 times in each of its longitudinal and transverse directions.

28. An article which is thermoformed from the film of claim 1.

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29. A film which comprises at least one fluoropolymer layer, wherein said fluoropolymer comprises a poly(chlorotrifluoroethylene) homopolymer or copolymer, and at least one cyclo olefin polymer layer comprising at least one cyclo olefin homopolymer or a copolymer of a cyclo olefin and ethylene, attached to a surface of said fluoropolymer layer by an intermediate adhesive layer comprised of a polyurethane, an epoxy or a polyolefin having at least one functional moiety of an unsaturated carboxylic acid or anhydride thereof, which film has been uniaxially stretched at least about 1.5 times in one linear direction or biaxially stretched at least about 1.5 times in each of its longitudinal and transverse directions.

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